

**REMARKS**

Claims 31-60, 131-144, 147-150, and 155-185 are pending in the present application.

Claims 1-15, 75-102, 145, 146, and 151-154 have been withdrawn from consideration as being drawn to a non-elected invention.

Claims 16-30, 61-74, 103-130 have been cancelled.

Claims 31 and 43 have been amended. No new matter is introduced by the amendments and support for the amendments is found throughout the specification, including, for example, on page 4, lines 30-31.

Claims 157-185 have been added. Support for Claim 157 is found in original Claims 31 and 45. Support for Claim 171 is found in original Claims 46 and 60. Support for new Claim 185 is found throughout the specification, including, for example, on page 8, lines 6-7. The remainder of the new claims corresponds to dependent Claims 32-44 and 47-59, previously filed. Therefore, Applicant respectfully requests reconsideration of the present claims in view of the following remarks.

**I. FORMAL MATTERS**

Applicant wishes to thank Examiner Droesch for acknowledging the allowability of the subject matter set forth in Claims 45 and 60, as well as allowing Claims 131-144 and 155-156. Because Examiner Droesch indicated Claims 45 and 60 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, those claims have been rewritten (Claims 157-184) as suggested.

**II. PRIOR ART REJECTIONS**

***Rejections under 35 U.S.C. §102***

Claims 31-32, 34, 44, 46, 47, 49, 59, 147 and 149 have been rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 5,792,187 to Adams (“Adams”). Applicants respectfully traverse the rejection as applied the claims as amended.

Adams discloses methods for controlling pain during cardioversion/defibrillation by stimulating the vagus nerve. *See* Col. 4, Lines 15-52. An electrode can be inserted into the jugular vein or placed on the neck to stimulate the vagal nerve to reduce the transmission of pain during cardioversion/defibrillation. *See* Col. 4, Lines 57-67 to Col. 5, Lines 1-5.

Claims 31 and 46 have been amended to specify that the vagus nerve is being stimulated during beating heart surgery. Adams does not disclose vagal stimulation during beating heart surgery and therefore does not disclose all elements of the claim. Applicants respectfully request withdrawal of this rejection.

***Rejections under 35 U.S.C. §103***

Claims 33, 35-43, 48, 50-58, 148 and 150 have been rejected under 35 U.S.C. §103(a) as being obvious over United States Patent No. 5,792,187 to Adams (“Adams”). Applicants traverse the rejection as applied the claims as amended.

Adams discloses methods of stimulating the vagus nerve to decrease the sensation of pain that occurs during defibrillation/cardioversion. *See* Col. 4, Lines 15-52. Defibrillation, by definition in Taber’s Cyclopedic Medical Dictionary, is “[t]ermination of ventricular fibrillation.” TABER’S CYCLOPEDIC MEDICAL

DICTIONARY, attached hereto, in pertinent part, as Exhibit A. Fibrillation is defined as “[q]uivering or spontaneous contraction of individual muscle fibers.” *Id.* Likewise, cardioversion is “the restoration of normal sinus rhythm by chemical or electrical means.” *Id.* In application, cardioversion is utilized to terminate arrhythmias. *Id.* Thus, Adams does not disclose vagus nerve stimulation during *beating heart surgery* as recited in the amended claims.

Furthermore, a “prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention.” *W.L. Gore & Associates, Inc v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983) cert. denied, 469 U.S. 851 (1984). As explained above, one of ordinary skill in the art would not be motivated to use the method of pain relief described in Adams during beating heart surgery. Adams does not provide any motivation, teaching or suggestion to practice the claimed method during beating heart surgery. As such, not all claim elements are disclosed in the prior art nor would it be obvious because Adams is deficient in disclosing using their method during beating heart surgery. Applicants respectfully request withdrawal of this rejection.

#### CONCLUSION

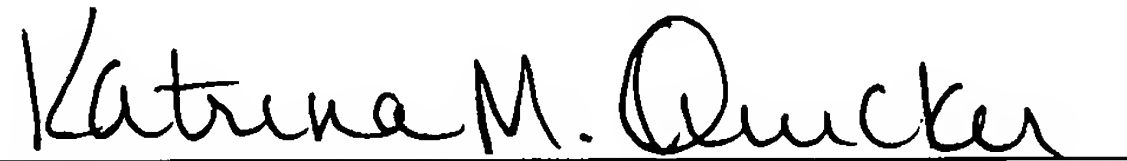
For at least the reasons given above, Applicant submits that Claims 31-60, 131-144, 147-150, and 155-185 define patentable subject matter. Accordingly, Applicant respectfully requests allowance of these claims.

The foregoing is submitted as a full and complete Response to the Office Action mailed August 25, 2004, and early and favorable consideration of the claims is requested.

Should the Examiner believe that anything further is necessary in order to place the application in better condition for allowance, the Examiner is respectfully requested to contact Applicant's representative at the telephone number listed below.

No additional fees are believed due; however, the Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, to Deposit Account No. 11-0855.

Respectfully submitted,

A handwritten signature in black ink, reading "Katrina M. Quicker". The signature is written in a cursive style with a horizontal line underneath.

Katrina M. Quicker, Esq.  
Reg. No. 55,554

KILPATRICK STOCKTON LLP  
1100 Peachtree Street  
Suite 2800  
Atlanta, GA 30309-4530  
Phone: (404) 815-6500  
Fax: (404) 815-6555  
Attorney Docket: 16294-0137 (52433-292707)